

TRAFFIC STUDY FOR
Trinity Presbyterian Church of Spring Valley
Education Center

Prepared by:

RCE Traffic and Transportation Engineering

9255 Dillon Drive
La Mesa, California 91941

(619) 589-9151

January 21, 2005

1.0 INTRODUCTION

This Traffic Study was prepared by **RCE** to evaluate the potential traffic and circulation impacts related to the expansion of the existing Church. The proposed site is located on the west side of Kenwood Drive south of Campo Road in the unincorporated community of Spring Valley

1.1 PROJECT DESCRIPTION

The project proposes expansion to their current site occur in three phases:

- 1) The addition of two modular classroom buildings that will house the 7th and 8th grades for approximately three years. This is anticipated to add 44 new students to the school. Add a 5040 square foot gymnasium to serve the recreation needs of the School.
- 2) Replace two existing modular buildings with new permanent structures.
- 3) Replace the remainder of the existing modular buildings.

The development of this project is estimated to generate a total of 62 weekday trips with 18 vehicles per hour being generated during the morning peak period and 6 vehicles per hour during the afternoon peak period on the adjacent roadways. Access to the site will be through the existing driveway onto Kenwood Drive. See figure 1 for the project site plan.

1.2 STUDY AREA

The study area boundaries were determined using the County of San Diego Guidelines. These Guidelines specify significance criteria for intersections and roadway segments which operate at Level of Service (LOS) E or F. These guidelines are used to determine if the project traffic or the project traffic combined with cumulative projects traffic would have direct or cumulative impacts to roadways or intersections.

Measures of Significant Project Impacts to Congestion Allowable Increases on Congested Roads and Intersections

| Road Segments | | | |
|---------------|--|---|-------------|
| | 2-Lane Road | 4-Lane Road | 6-Lane Road |
| LOS E | 200 ADT | 400 ADT | 600 ADT |
| LOS F | 100 ADT | 200 ADT | 300 ADT |
| Intersections | | | |
| | Signalized | Unsignalized | |
| LOS E | Delay of 2 seconds | 20 peak hour trips on a critical movement | |
| LOS F | Delay of 1 second, or 5 peak hour trips on a critical movement | 5 peak hour trips on a critical movement | |

The study area for this project was limited to intersections where project traffic exceeded 5 trips per hour to a critical move and roadway segments where project traffic exceeded 100 ADT. Based on the above

guidelines, the intersection of Kenwood Drive & Campo Road was determined to be included in the study area for this project, as well as street segments of Kenwood Drive and Campo Road adjacent to the project.

2.0 EXISTING TRAFFIC CONDITIONS

The following is an assessment of the existing conditions of the roadway network adjacent to the project relevant to this study.

2.1 EXISTING CIRCULATION NETWORK

Access to the site is provided by the following facilities:

Kenwood Drive is a two-lane residential collector roadway in the project vicinity with pavement widths from 30 to 40 feet and sidewalks in some areas. In this study, Kenwood Drive will be analyzed as a "Residential Collector".

Campo Road is a two-lane roadway in the study area. Campo Road is a circulation element roadway classified as a "Collector Road" in the County of San Diego Circulation Element of the General Plan. Because of the current geometrics and lane striping on Campo Road within the study area, we will analyze it as a "Light Collector" roadway in this study.

2.2 EXISTING TRAFFIC VOLUMES

Existing daily traffic volume data and peak hour turning volumes for the study area roadways and intersection were obtained from traffic counts performed during January 2005 by Southland Car Counters. Refer to figure 2 existing traffic volumes. Actual count sheets are located in Appendix A

2.3 LEVEL OF SERVICE METHODOLOGY

The Level of Service (LOS) is a qualitative measure used to describe the operational conditions within a traffic stream, and a motorist and/or passenger's perception of the performance of the roadway. LOS is designated a letter from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is typically used as a design standard, while LOS D is considered acceptable for peak period operating conditions by most jurisdictions.

2.3.1 ROADWAY LEVEL OF SERVICE

County of San Diego roadways within the study area were evaluated using the County of San Diego's "average daily vehicle trips" level of service volume table. This methodology compares daily traffic volumes to roadway classifications to determine the approximate daily street segment level of service. This methodology is based on generalized assumptions regarding roadway design and traffic compositions and does not accurately reflect peak hour operating characteristics. It is intended to be used as a guide to help determine roadway classifications and sizing.

2.3.2 INTERSECTION LEVEL OF SERVICE

Intersection levels of service were evaluated using the 2000 Highway Capacity Manual methods for signalized and unsignalized intersections. The University of Florida Transportation Research Center's Highway Capacity Software program was used in analyzing the intersections within the study area. The County of San Diego Public Facilities Element has set standards for adequate traffic flow through an existing intersection at LOS D or better. If the delay at an existing intersection declines to LOS E (unstable flow) or worse, it is considered an unacceptable condition by the County.

2.4 ANALYSIS OF EXISTING TRAFFIC CONDITIONS

2.4.1 ROADWAYS

All roadways within the study area currently operate at LOS D or better.

| Street Segment | LOS E Capacity | Existing | |
|-----------------------|-----------------------------|----------|-----|
| | | ADT | LOS |
| Kenwood Drive: | | | |
| South of the site | 4,500 (LOS C) | 2,695 | C |
| North of the site | 4,500 (LOS C) | 2,695 | C |
| Campo Road: | | | |
| West of Kenwood | 16,200 (Light Collector) | 10,351 | D |
| East of Kenwood | 16,200 (Light Collector) | 10,351 | D |

2.4.2 INTERSECTIONS

The intersection of Kenwood Drive and Campo Road currently operates at LOS D during the AM peak hour and LOS B during the PM peak hour. See Appendix B for LOS calculations.

| Intersection | Existing | | | |
|-----------------|----------|-------|-----|-------|
| | AM | | PM | |
| | LOS | Delay | LOS | Delay |
| Kenwood & Campo | D | 25.7 | B | 14.4 |
| | | | | |

Delay is maximum delay shown in seconds

OWNERS
TRINITY CHRISTIAN TOWN, 3402 W. 10TH ST.
COMMITMENT REPORT
LAND SALE AGREEMENT COMPANY
POLICY NO. 25775-1-1 DATED: JANUARY 21, 1989

LEGAL DESCRIPTION

THE TRINITY CHRISTIAN TOWN, 3402 W. 10TH ST. IS A 100% OWNED COMPANY WHICH HAS BEEN INCORPORATED IN THE STATE OF CALIFORNIA. THE TRINITY CHRISTIAN TOWN, 3402 W. 10TH ST. IS A 100% OWNED COMPANY WHICH HAS BEEN INCORPORATED IN THE STATE OF CALIFORNIA. THE TRINITY CHRISTIAN TOWN, 3402 W. 10TH ST. IS A 100% OWNED COMPANY WHICH HAS BEEN INCORPORATED IN THE STATE OF CALIFORNIA.

EASEMENTS

1. EASEMENT GRANTED TO THE TRINITY CHRISTIAN TOWN, 3402 W. 10TH ST. FOR THE PURPOSES OF THE TRINITY CHRISTIAN TOWN, 3402 W. 10TH ST. IS A 100% OWNED COMPANY WHICH HAS BEEN INCORPORATED IN THE STATE OF CALIFORNIA.
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BUILDING AREA SUMMARY

| EXISTING BUILDINGS | AREA |
|---|--------------|
| CE BUILDING | = 7790 SF. |
| SANCTUARY + FELLOWSHIP + ADMINISTRATION | = 22,491 SF. |
| 5TH & 8TH CLASSROOMS | = 1,277 SF. |
| TOTAL | = 31,548 SF. |

NEW BUILDINGS:

| | |
|----------------------------|--------------|
| PHASE 1 | |
| EDUCATION CENTER | |
| CLASSROOMS (4) @ 744 SF. | = 2,976 SF. |
| MULTIPURPOSE (4) @ 744 SF. | = 2,976 SF. |
| CORE | = 1,724 SF. |
| TOTAL | = 7,676 SF. |
| PHASE 2 | |
| GYMNASIUM | = 5,040 SF. |
| PHASE 3 & 4 | |
| 2 STORY WARD BLDG | = 6,480 SF. |
| TOTAL | = 18,944 SF. |

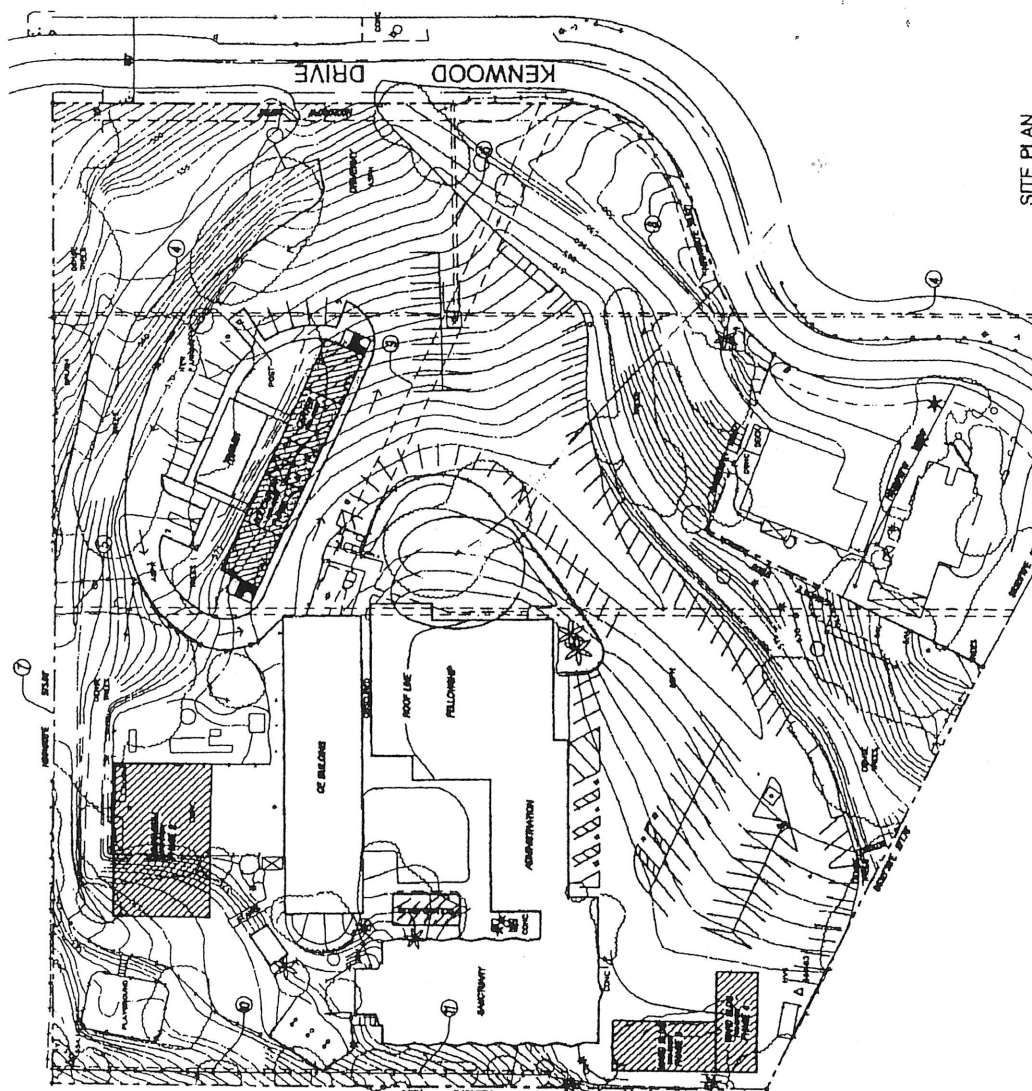
| | |
|--------------------------|--------------|
| EXISTING + NEW BUILDINGS | = 50,492 SF. |
| TOTAL AREA | |



Salem/Livingston Architects

FIGURE 1

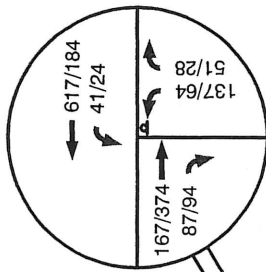
SITE PLAN



SITE PLAN
1-30

TRINITY PRESBYTERIAN CHURCH OF SPRING VALLEY - EDUCATION CENTER
FEASIBILITY STUDY

RCE
TRAFFIC AND TRANSPORTATION ENGINEERING
3225 DILLON DRIVE, LA MESA, CA 91941
tel. 598-9151 fax 598-8209



LEGEND

XX/XX = AM/PM PEAK HOUR VOLUMES

<XXX> = ADT VOLUMES

▲ = STOP SIGN

■ = TRAFFIC SIGNAL

FIGURE 2

EXISTING TRAFFIC VOLUMES

RCE TRAFFIC AND TRANSPORTATION ENGINEERING
 9235 DILLON DRIVE, LA MESA, CA 91941
 Tel. 659-8151 Fax 659-9209

3.0 EXISTING PLUS PROJECT TRAFFIC CONDITIONS

To properly evaluate the traffic impacts of this project on the existing roadways, the amount of traffic generated by the project must be estimated and distributed over the study area street system. Section 3.1 describes the methods and assumptions used to forecast project generated traffic volumes. Section 3.2 describes the analysis and results to determine the project impacts on the existing streets.

3.1 PROJECT-GENERATED TRAFFIC VOLUMES

3.1.1 PROJECT TRAFFIC GENERATION

This project proposes to add modular buildings to house 7th and 8th grade classes which will serve an additional 44 students. Using the Sandag land use designation of "Education – Middle/Junior High", ADT is estimated at 1.4 trips per student, with 30% AM and 9% PM peak hour trips. This calculation reveals a total net increase of an average of 62 vehicles trips per day. The estimated net increase of traffic to the street system during the morning peak period is 18 trips and to the afternoon peak period is 6 trips.

3.1.2 PROJECT TRAFFIC DISTRIBUTION

To properly evaluate impacts of the project to the surrounding street system, it is necessary to distribute project-generated traffic in a manner consistent with the surrounding land uses and anticipated origins and destinations. The distribution of trips generated by this project are shown in figure 3. Figure 4 shows existing plus project traffic volumes.

3.2 EXISTING PLUS PROJECT IMPACTS

Roadway Segments:

All roadway segments within the study area continue to operate at LOS D or better with the addition of project traffic. Based on the County of San Diego Significance Criteria, the project will have no direct impacts to the roadways.

| Street Segment | LOS E Capacity | Existing | | Existing + Project | |
|-----------------------|-----------------------------|----------|-----|--------------------|-----|
| | | ADT | LOS | ADT | LOS |
| Kenwood Drive: | | | | | |
| South of the site | 4,500 | 2,695 | C | 2,711 | C |
| North of the site | 4,500 | 2,695 | C | 2,741 | C |
| Campo Road: | | | | | |
| West of Kenwood | 16,200 (Light Collector) | 10,351 | D | 10,379 | D |
| East of Kenwood | 16,200 | 10,351 | D | 10,370 | D |

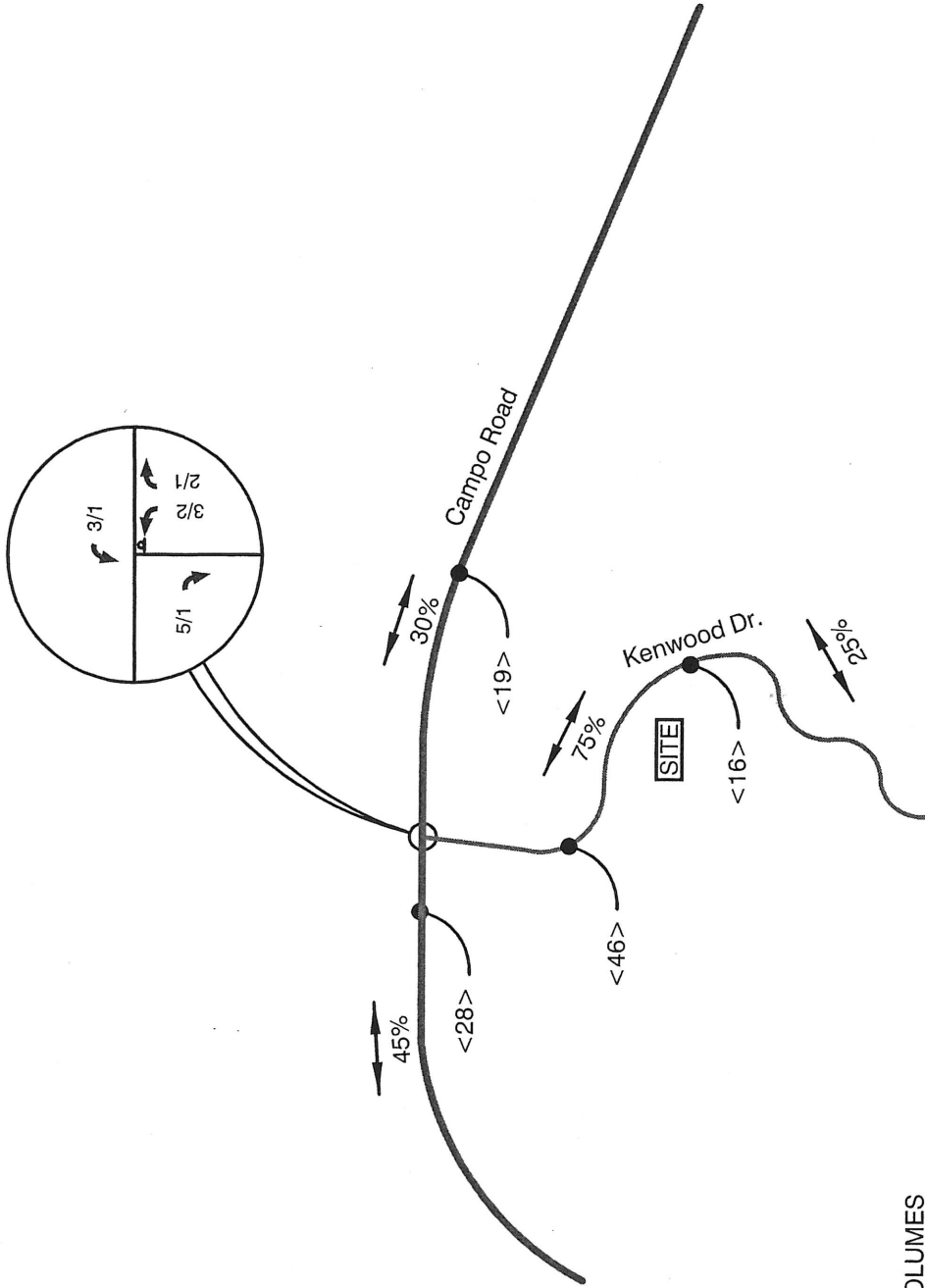
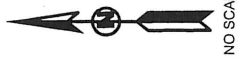
Intersections:

The intersection of Kenwood Drive and Campo Road continues to operate at acceptable levels of service with project traffic added. The table below shows intersection LOS and average delays for the existing and existing + project scenarios at the study area intersection. See Appendix B for LOS calculations.

| Intersection | Existing | | | | Existing + Project | | | |
|-----------------|----------|-------|-----|-------|--------------------|-------|-----|-------|
| | AM | | PM | | AM | | PM | |
| | LOS | delay | LOS | delay | LOS | delay | LOS | delay |
| Kenwood & Campo | D | 25.7 | B | 14.4 | D | 26.9 | B | 14.6 |
| | | | | | | | | |

Delay is maximum delay shown in seconds

Based on the County of San Diego Significance Criteria, the project has no direct impacts to this intersection.



LEGEND

XXXX = AM/PM PEAK HOUR VOLUMES

<XXX> = ADT VOLUMES

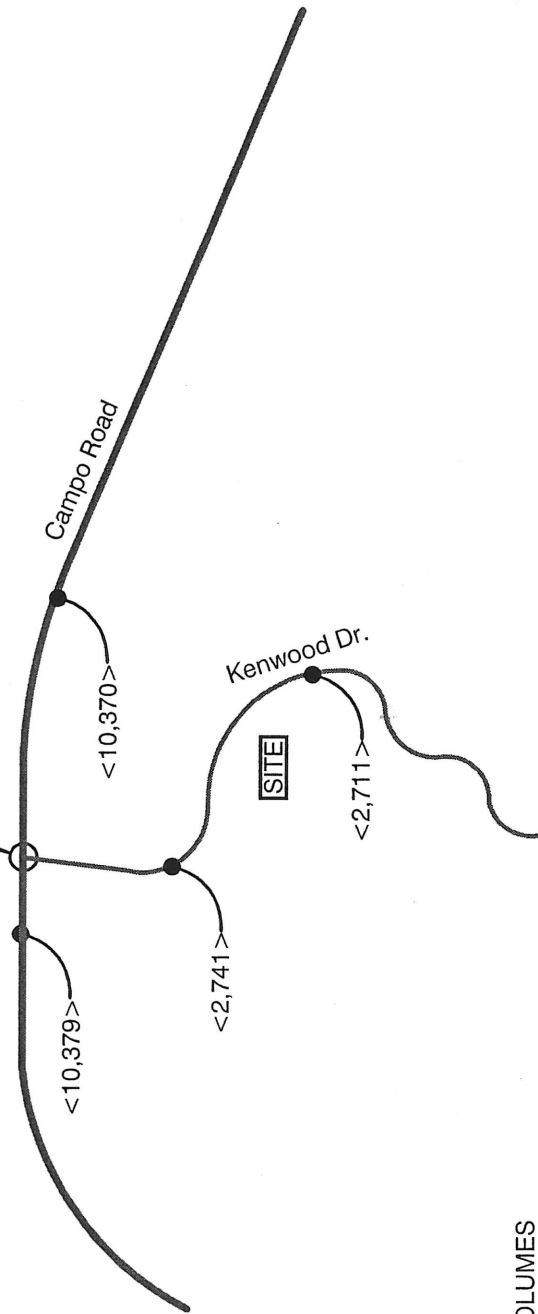
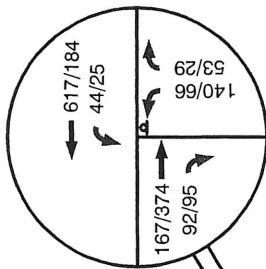
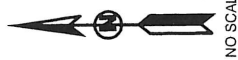
▲ = STOP SIGN

⬢ = TRAFFIC SIGNAL

FIGURE 3

PROJECT TRAFFIC VOLUMES

RCE TRAFFIC AND TRANSPORTATION ENGINEERING
 9225 DILLON DRIVE, LA MESA, CA 91941
 tel. 659-8151 fax 659-8209



LEGEND

XX/XX = AM/PM PEAK HOUR VOLUMES

<XXX> = ADT VOLUMES

▲ = STOP SIGN

■ = TRAFFIC SIGNAL

FIGURE 4

EXISTING + PROJECT TRAFFIC VOLUMES

4.0

EXISTING PLUS PROJECT PLUS CUMULATIVE PROJECTS

This section analyzes the roadway network assuming the construction of all development projects currently active within and adjacent to the project site which have impacts on traffic in the study area. In order to determine the locations and anticipated traffic impacts of these "cumulative" projects, Geographical Information Systems (GIS) (with discretionary projects layering) mapping was purchased from the County. The version of the mapping used for this study is dated November 2004.

See figure 5 for locations of these cumulative projects. Refer to figure 6 for existing plus project plus cumulative traffic volumes.

4.1

EXISTING PLUS CUMULATIVE PROJECTS IMPACTS

Roadway Segments:

All study area roadways continue to operate at acceptable levels with the addition of cumulative project traffic. Based on the County of San Diego Significance Criteria, the project will have no cumulative impacts to these roadway segments.

| Street Segment | LOS E Capacity | Existing | | Existing + Project | | Existing + Project + Cumulative | |
|-----------------------|-----------------------------|----------|-----|--------------------|-----|---------------------------------|-----|
| | | ADT | LOS | ADT | LOS | ADT | LOS |
| Kenwood Drive: | | | | | | | |
| South of the site | 4,500 (LOS C) | 2,695 | C | 2,711 | C | 2,711 | C |
| North of the site | 4,500 (LOS C) | 2,695 | C | 2,741 | C | 2,741 | C |
| Campo Road: | | | | | | | |
| West of Kenwood | 16,200 (Light Collector) | 10,351 | D | 10,379 | D | 10,410 | D |
| East of Kenwood | 16,200 (Light Collector) | 10,351 | D | 10,370 | D | 10,394 | D |

Intersections:

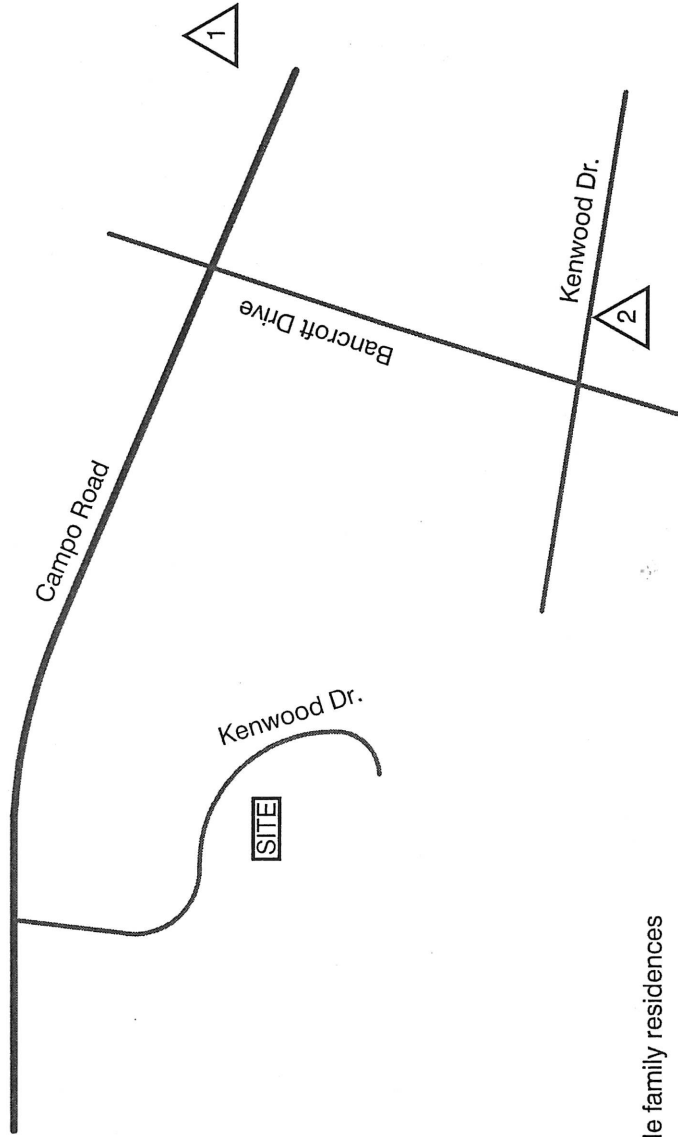
The intersection of Kenwood Drive and Campo Road continues to operate at acceptable levels of service with project traffic and cumulative traffic added. The table below shows intersection LOS and average delays for the "existing" the "existing + project" and the "existing + project + cumulative" scenarios at the study area intersection. See Appendix B for LOS calculations.

| Intersection | Existing | | | | Existing + Project | | | | Existing + cumulative | | | |
|----------------------------|----------|-------|-----|-------|--------------------|-------|-----|-------|-----------------------|-------|-----|-------|
| | AM | | PM | | AM | | PM | | AM | | PM | |
| | LOS | delay | LOS | delay | LOS | delay | LOS | delay | LOS | delay | LOS | delay |
| Kenwood & Campo | D | 25.7 | B | 14.4 | D | 26.9 | B | 14.6 | D | 27.0 | B | 14.6 |

Based on the County of San Diego Significance Criteria, the project will have no cumulative impacts to this intersection.



NO SCALE



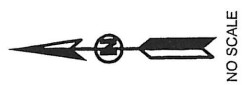
△ 1 TM 5230 - 9 Single family residences

△ 2 STP 01-041 - 11 Apartments

FIGURE 5

CUMULATIVE PROJECT LOCATIONS

RCE
TRAFFIC AND TRANSPORTATION ENGINEERING
8225 DILLON DRIVE, LA MESA, CA 91941
tel. 656-9161 fax 656-9209



XX/XX = AM/PM PEAK HOUR VOLUMES

<XXX> = ADT VOLUMES

• = STOP SIGN

• = TRAFFIC SIGNAL

FIGURE 6

EXISTING + PROJECT + CUMULATIVE
TRAFFIC VOLUMES

RCE

TRAFFIC AND TRANSPORTATION ENGINEERING

FFIC AND TRANSPORTATION ENGINEERING
9255 DILLON DRIVE, LA MESA, CA. 91941
tel. 589-9151 fax 589-9209

5.0 PROJECT IMPACTS

DIRECT IMPACTS:

Based on the guidelines set forth in the County of San Diego's "Guidelines for Determining Significance", direct impacts would occur if the additional ADT generated by the project will cause a residential street to exceed its design capacity. Direct impacts are impacts that would result solely from the implementation of the project.

According to these guidelines, exceeding the following significance guidelines will be considered substantial evidence that the project will have a significant direct impact on a road segment if:

- The additional or redistributed ADT generated by the proposed project will cause an adjacent or nearby County Circulation Element Road to operate below LOS D and will significantly increase congestion as identified in the table below, and/or
- The additional or redistributed ADT generated by the proposed project will cause a residential street to exceed its design capacity, and/or
- The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a Circulation Element Road, State Highway or intersection currently operating at LOS E or LOS F as identified in the table below.

Measures of Significant Project Impacts to Congestion
Allowable Increases on Congested Roads and Intersections

| Road Segments | | | |
|---------------|--|---|-------------|
| | 2-Lane Road | 4-Lane Road | 6-Lane Road |
| LOS E | 200 ADT | 400 ADT | 600 ADT |
| LOS F | 100 ADT | 200 ADT | 300 ADT |
| Intersections | | | |
| | Signalized | Unsignalized | |
| LOS E | Delay of 2 seconds | 20 peak hour trips on a critical movement | |
| LOS F | Delay of 1 second, or 5 peak hour trips on a critical movement | 5 peak hour trips on a critical movement | |

According to these guidelines, exceeding the following significance guidelines will be considered substantial evidence that the project will have a significant direct impact on an intersection if:

1. Unsignalized:

- The proposed project will generate 20 or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate below LOS D, or
- The proposed project will generate 20 or more peak hour trips to a critical movement of an unsignalized intersection and the unsignalized intersection currently operates at LOS E, or

- The proposed project will generate 5 or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate below LOS E, or
- The proposed project will generate 5 or more peak hour trips to a critical movement of an unsignalized intersection and the unsignalized intersection currently operates at LOS F, or
- Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance and/or other factors, it is found that the generation rate less than those specified above would significantly impact the operations of the intersection.

Based on the County of San Diego Significance Criteria, the project has no direct impacts to the intersections or roadway segments in the study area.

CUMULATIVE IMPACTS:

Cumulative impacts occur when: 1) build-out of all near term projects result in a cumulative traffic impact and 2) the amount of traffic generated by the individual proposed project contributes (even in a small part) to that cumulative impact.

Based on the County of San Diego Significance Criteria, the project has no cumulative impacts to the study area roadway segments or intersections.

6.1 PROPOSED MITIGATION MEASURES

DIRECT IMPACTS:

As outlined above, the addition of project generated trips to the surrounding roadways will have no direct impacts to the existing intersections or roadway segments in the study area. Therefore, no mitigations are necessary for direct impacts.

CUMULATIVE IMPACTS:

As outlined above, the addition of project generated trips to the surrounding roadways will have no cumulative impacts to the existing intersections or roadway segments in the study area. Therefore, no mitigations are necessary for cumulative impacts.

Please feel free to call me at 589-9151 if you have questions regarding any of the above.

Sincerely,


 Richard Crafts T.E., C.E.

APPENDIX

Trinity Presbyterian Church of Spring Valley

APPENDIX A – Existing Traffic Counts

APPENDIX B – Level of Service Calculations

APPENDIX - A

Existing Traffic Counts

Volumes for: Tuesday, January 18, 2005

City: La Mesa

Project #: 04-4447-001

Location: Kenwood Dr N/o Trinity Church

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB |
|-----------|----|-----|----|-----|-----------|----|----|----|-----|
| 00:00 | 1 | 1 | | | 12:00 | 23 | 13 | | |
| 00:15 | 2 | 0 | | | 12:15 | 24 | 15 | | |
| 00:30 | 0 | 2 | | | 12:30 | 13 | 23 | | |
| 00:45 | 1 | 4 | 1 | 4 | 12:45 | 19 | 79 | 15 | 66 |
| 01:00 | 2 | 3 | | | 13:00 | 23 | 18 | | |
| 01:15 | 1 | 2 | | | 13:15 | 20 | 27 | | |
| 01:30 | 1 | 1 | | | 13:30 | 25 | 21 | | |
| 01:45 | 0 | 4 | 0 | 6 | 13:45 | 13 | 81 | 16 | 82 |
| 02:00 | 0 | 1 | | | 14:00 | 26 | 23 | | |
| 02:15 | 1 | 2 | | | 14:15 | 11 | 24 | | |
| 02:30 | 0 | 1 | | | 14:30 | 9 | 16 | | |
| 02:45 | 1 | 2 | 0 | 4 | 14:45 | 18 | 64 | 21 | 84 |
| 03:00 | 0 | 2 | | | 15:00 | 17 | 25 | | |
| 03:15 | 1 | 1 | | | 15:15 | 13 | 28 | | |
| 03:30 | 0 | 0 | | | 15:30 | 24 | 28 | | |
| 03:45 | 1 | 2 | 1 | 4 | 15:45 | 18 | 72 | 37 | 118 |
| 04:00 | 2 | 2 | | | 16:00 | 20 | 27 | | |
| 04:15 | 1 | 1 | | | 16:15 | 22 | 24 | | |
| 04:30 | 2 | 1 | | | 16:30 | 18 | 19 | | |
| 04:45 | 5 | 10 | 1 | 5 | 16:45 | 19 | 79 | 25 | 95 |
| 05:00 | 3 | 0 | | | 17:00 | 15 | 18 | | |
| 05:15 | 3 | 1 | | | 17:15 | 30 | 41 | | |
| 05:30 | 10 | 2 | | | 17:30 | 17 | 33 | | |
| 05:45 | 7 | 23 | 3 | 6 | 17:45 | 16 | 78 | 29 | 121 |
| 06:00 | 15 | 2 | | | 18:00 | 13 | 22 | | |
| 06:15 | 21 | 1 | | | 18:15 | 13 | 17 | | |
| 06:30 | 18 | 4 | | | 18:30 | 16 | 18 | | |
| 06:45 | 36 | 90 | 5 | 12 | 18:45 | 13 | 55 | 13 | 70 |
| 07:00 | 21 | 7 | | | 19:00 | 10 | 16 | | |
| 07:15 | 24 | 8 | | | 19:15 | 11 | 25 | | |
| 07:30 | 37 | 12 | | | 19:30 | 12 | 21 | | |
| 07:45 | 34 | 116 | 17 | 44 | 19:45 | 11 | 44 | 13 | 75 |
| 08:00 | 28 | 32 | | | 20:00 | 3 | 11 | | |
| 08:15 | 79 | 63 | | | 20:15 | 5 | 12 | | |
| 08:30 | 43 | 33 | | | 20:30 | 5 | 8 | | |
| 08:45 | 39 | 189 | 23 | 151 | 20:45 | 14 | 27 | 12 | 43 |
| 09:00 | 30 | 20 | | | 21:00 | 10 | 16 | | |
| 09:15 | 22 | 21 | | | 21:15 | 2 | 9 | | |
| 09:30 | 21 | 21 | | | 21:30 | 5 | 7 | | |
| 09:45 | 18 | 91 | 22 | 84 | 21:45 | 6 | 23 | 5 | 37 |
| 10:00 | 25 | 20 | | | 22:00 | 5 | 15 | | |
| 10:15 | 30 | 22 | | | 22:15 | 1 | 7 | | |
| 10:30 | 22 | 20 | | | 22:30 | 5 | 9 | | |
| 10:45 | 21 | 98 | 21 | 83 | 22:45 | 1 | 12 | 4 | 35 |
| 11:00 | 18 | 18 | | | 23:00 | 3 | 2 | | |
| 11:15 | 25 | 25 | | | 23:15 | 3 | 4 | | |
| 11:30 | 30 | 23 | | | 23:30 | 2 | 4 | | |
| 11:45 | 34 | 107 | 30 | 96 | 23:45 | 0 | 8 | 2 | 12 |

| | | | | | | |
|-------------------|-----|-----|-------------|-----|-----|-------------|
| Total Vol. | 736 | 499 | 1235 | 622 | 838 | 1460 |
|-------------------|-----|-----|-------------|-----|-----|-------------|

| Daily Totals | | | | WB | Combined |
|--------------|------|----|----|----|----------|
| NB | SB | EB | WB | | |
| 1358 | 1337 | | | | 2695 |

| AM | | | | PM | | | |
|-----------|-------|-------|--------------|-------|-------|--|--------------|
| Split % | 59.6% | 40.4% | 45.8% | 42.6% | 57.4% | | 54.2% |
| Peak Hour | 08:15 | 08:00 | 08:00 | 12:45 | 17:15 | | 17:15 |
| Volume | 191 | 151 | 340 | 87 | 125 | | 201 |
| P.H.F. | 0.60 | 0.60 | 0.60 | 0.89 | 0.76 | | 0.71 |

Volumes for: Tuesday, January 18, 2005

City: La Mesa

Project #: 04-4447-002

Location: Campo Rd W/o Kenwood Dr

| AM Period | NB | SB | EB | WB | PM Period | NB | SB | EB | WB |
|-----------|----|----|----|-----|-----------|-----|-----|-----|-----|
| 00:00 | | | 20 | 4 | 12:00 | | | 56 | 70 |
| 00:15 | | | 10 | 18 | 12:15 | | | 77 | 74 |
| 00:30 | | | 16 | 14 | 12:30 | | | 80 | 70 |
| 00:45 | | | 12 | 58 | 0 | 36 | 94 | 93 | 306 |
| 01:00 | | | 7 | 18 | 13:00 | | | 92 | 49 |
| 01:15 | | | 6 | 14 | 13:15 | | | 100 | 52 |
| 01:30 | | | 8 | 4 | 13:30 | | | 84 | 46 |
| 01:45 | | | 4 | 25 | 0 | 36 | 61 | 78 | 354 |
| 02:00 | | | 8 | 9 | 14:00 | | | 104 | 84 |
| 02:15 | | | 6 | 2 | 14:15 | | | 101 | 46 |
| 02:30 | | | 7 | 3 | 14:30 | | | 93 | 70 |
| 02:45 | | | 2 | 23 | 4 | 18 | 41 | 84 | 382 |
| 03:00 | | | 5 | 2 | 15:00 | | | 112 | 70 |
| 03:15 | | | 6 | 4 | 15:15 | | | 98 | 60 |
| 03:30 | | | 4 | 3 | 15:30 | | | 107 | 74 |
| 03:45 | | | 5 | 20 | 4 | 13 | 33 | 104 | 421 |
| 04:00 | | | 4 | 4 | 16:00 | | | 106 | 52 |
| 04:15 | | | 4 | 4 | 16:15 | | | 128 | 49 |
| 04:30 | | | 4 | 22 | 16:30 | | | 118 | 60 |
| 04:45 | | | 4 | 16 | 14 | 44 | 60 | 108 | 460 |
| 05:00 | | | 9 | 45 | 17:00 | | | 126 | 88 |
| 05:15 | | | 9 | 32 | 17:15 | | | 109 | 70 |
| 05:30 | | | 12 | 40 | 17:30 | | | 107 | 49 |
| 05:45 | | | 15 | 45 | 68 | 185 | 230 | 129 | 471 |
| 06:00 | | | 12 | 94 | 18:00 | | | 103 | 84 |
| 06:15 | | | 9 | 130 | 18:15 | | | 97 | 46 |
| 06:30 | | | 21 | 216 | 18:30 | | | 77 | 52 |
| 06:45 | | | 22 | 64 | 333 | 773 | 837 | 65 | 342 |
| 07:00 | | | 31 | 252 | 19:00 | | | 60 | 56 |
| 07:15 | | | 31 | 230 | 19:15 | | | 73 | 49 |
| 07:30 | | | 34 | 58 | 19:30 | | | 62 | 24 |
| 07:45 | | | 62 | 158 | 122 | 662 | 820 | 62 | 257 |
| 08:00 | | | 67 | 216 | 20:00 | | | 54 | 28 |
| 08:15 | | | 70 | 135 | 20:15 | | | 48 | 56 |
| 08:30 | | | 75 | 112 | 20:30 | | | 46 | 32 |
| 08:45 | | | 69 | 281 | 108 | 571 | 852 | 46 | 194 |
| 09:00 | | | 66 | 86 | 21:00 | | | 48 | 24 |
| 09:15 | | | 56 | 70 | 21:15 | | | 40 | 24 |
| 09:30 | | | 60 | 68 | 21:30 | | | 35 | 28 |
| 09:45 | | | 55 | 237 | 75 | 299 | 536 | 31 | 154 |
| 10:00 | | | 60 | 75 | 22:00 | | | 34 | 32 |
| 10:15 | | | 54 | 60 | 22:15 | | | 31 | 21 |
| 10:30 | | | 51 | 68 | 22:30 | | | 39 | 14 |
| 10:45 | | | 55 | 220 | 75 | 278 | 498 | 28 | 132 |
| 11:00 | | | 50 | 66 | 23:00 | | | 26 | 21 |
| 11:15 | | | 60 | 65 | 23:15 | | | 29 | 32 |
| 11:30 | | | 65 | 50 | 23:30 | | | 18 | 4 |
| 11:45 | | | 48 | 223 | 54 | 235 | 458 | 16 | 89 |

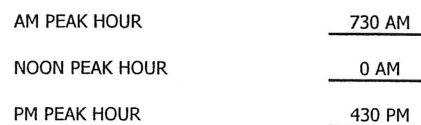
| | | | | | | | | |
|-------------------|--|------|------|-------------|--|------|------|-------------|
| Total Vol. | | 1370 | 3150 | 4520 | | 3562 | 2269 | 5831 |
|-------------------|--|------|------|-------------|--|------|------|-------------|

| | | Daily Totals | | Combined |
|----|----|---------------------|------|-----------------|
| NB | SB | EB | WB | |
| | | 4932 | 5419 | 10351 |

| AM | | | |
|------------------|-------|-------|--------------|
| Split % | 30.3% | 69.7% | 43.7% |
| Peak Hour | 08:00 | 06:30 | 06:30 |
| Volume | 281 | 1031 | 1136 |
| P.H.F. | 0.94 | 0.77 | 0.80 |

| PM | | |
|-----------|-------|--------------|
| 61.1% | 38.9% | 56.3% |
| 16:15 | 12:00 | 16:30 |
| 480 | 284 | 745 |
| 0.94 | 0.96 | 0.87 |

Project #: 04-4446-001



Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Kenwood Dr

DATE: 1/18/2005

LOCATION: City of La Mesa

E-W STREET: Campo Rd

DAY: TUESDAY

PROJECT# 04-4446-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|----------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
| LANES: | NL 1 | NT 0 | NR 2 | SL 0 | ST 0 | SR 0 | EL 0 | ET 2 | ER 1 | WL 2 | WT 1 | WR 0 | TOTAL |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 12 | 0 | 5 | | | | | 23 | 3 | 4 | 126 | | 173 |
| 7:15 AM | 24 | 0 | 4 | | | | | 22 | 6 | 4 | 196 | | 256 |
| 7:30 AM | 29 | 0 | 10 | | | | | 37 | 7 | 5 | 173 | | 261 |
| 7:45 AM | 28 | 0 | 11 | | | | | 48 | 16 | 4 | 203 | | 310 |
| 8:00 AM | 19 | 1 | 11 | | | | | 41 | 25 | 11 | 118 | | 226 |
| 8:15 AM | 61 | 0 | 19 | | | | | 41 | 39 | 21 | 123 | | 304 |
| 8:30 AM | 36 | 0 | 11 | | | | | 55 | 15 | 6 | 59 | | 182 |
| 8:45 AM | 24 | 0 | 7 | | | | | 41 | 21 | 6 | 47 | | 146 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |

| TOTAL VOLUMES = | NL 233 | NT 1 | NR 78 | SL 0 | ST 0 | SR 0 | EL 0 | ET 308 | ER 132 | WL 61 | WT 1045 | WR 0 | TOTAL 1858 |
|--------------------|-----------|---------|----------|---------|---------|---------|---------|-----------|-----------|----------|------------|---------|---------------|
|--------------------|-----------|---------|----------|---------|---------|---------|---------|-----------|-----------|----------|------------|---------|---------------|

AM Peak Hr Begins at: 730 AM

| PEAK VOLUMES = | 137 | 1 | 51 | 0 | 0 | 0 | 0 | 167 | 87 | 41 | 617 | 0 | 1101 |
|---------------------|-----|-------|----|---|-------|---|---|-------|----|----|-------|---|-------|
| PEAK HR. FACTOR: | | 0.591 | | | 0.000 | | | 0.794 | | | 0.795 | | 0.888 |

CONTROL: Signalized

Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Kenwood Dr

DATE: 1/18/2005

LOCATION: City of La Mesa

E-W STREET: Campo Rd

DAY: TUESDAY

PROJECT# 04-4446-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---------|------------|----|----|------------|----|----|-----------|-----|----|-----------|----|----|-------|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 1 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 19 | | 3 | | | | | 85 | 20 | 9 | 39 | | 175 |
| 4:15 PM | 18 | | 7 | | | | | 97 | 19 | 8 | 36 | | 185 |
| 4:30 PM | 15 | | 5 | | | | | 95 | 23 | 4 | 50 | | 192 |
| 4:45 PM | 17 | | 6 | | | | | 96 | 20 | 7 | 48 | | 194 |
| 5:00 PM | 11 | | 4 | | | | | 107 | 15 | 6 | 43 | | 186 |
| 5:15 PM | 21 | | 13 | | | | | 76 | 36 | 7 | 43 | | 196 |
| 5:30 PM | 10 | | 8 | | | | | 81 | 30 | 5 | 45 | | 179 |
| 5:45 PM | 12 | | 8 | | | | | 105 | 25 | 5 | 32 | | 187 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|-----------|-----|----|----|----|----|----|----|-----|-----|----|-----|----|-------|
| VOLUMES = | 123 | 0 | 54 | 0 | 0 | 0 | 0 | 742 | 188 | 51 | 336 | 0 | 1494 |

PM Peak Hr Begins at: 430 PM

| PEAK | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|-----------|-------|----|----|-------|----|----|-------|-----|----|-------|-----|----|-------|
| VOLUMES = | 64 | 0 | 28 | 0 | 0 | 0 | 0 | 374 | 94 | 24 | 184 | 0 | 768 |
| PEAK HR. | | | | | | | | | | | | | |
| FACTOR: | 0.676 | | | 0.000 | | | 0.959 | | | 0.945 | | | 0.980 |

CONTROL: Signalized

APPENDIX - B

Level of Service Calculations

TWO-WAY-STOP CONTROL SUMMARY

Analyst: RHC
 Agency/Co.: RCE
 Date Performed: 12/24/2004
 Analysis Time Period: AM Peak - existing
 Intersection: Campo & Kenwood
 Jurisdiction: County of San Diego
 Units: U. S. Customary
 Analysis Year: 2004
 Project ID: Trinity Church
 East/West Street: Campo Road
 North/South Street: Kenwood Drive
 Intersection Orientation: EW

Study period (hrs): 1.00

Vehicle Volumes and Adjustments

| Major Street: | Approach | Eastbound | | | | Westbound | | |
|------------------------|-----------|-----------|------|---|------|-----------|----|--|
| | Movement | 1 | 2 | 3 | 4 | 5 | 6 | |
| | | L | T | R | L | T | R | |
| Volume | | 167 | 87 | | 41 | 617 | | |
| Peak-Hour Factor, PHF | | 1.00 | 1.00 | | 1.00 | 1.00 | | |
| Hourly Flow Rate, HFR | | 167 | 87 | | 41 | 617 | | |
| Percent Heavy Vehicles | | -- | -- | | 0 | -- | -- | |
| Median Type/Storage | Undivided | | | | / | | | |
| RT Channelized? | | | | | | | | |
| Lanes | | 1 | 0 | | | 0 | 1 | |
| Configuration | | | TR | | | LT | | |
| Upstream Signal? | | No | | | | No | | |

| Minor Street: | Approach | Northbound | | | | Southbound | | |
|----------------------------------|----------|------------|------|------|----|------------|----|--|
| | Movement | 7 | 8 | 9 | 10 | 11 | 12 | |
| | | L | T | R | L | T | R | |
| Volume | | 137 | 0 | 51 | | | | |
| Peak Hour Factor, PHF | | 1.00 | 1.00 | 1.00 | | | | |
| Hourly Flow Rate, HFR | | 137 | 0 | 51 | | | | |
| Percent Heavy Vehicles | | 0 | 0 | 0 | | | | |
| Percent Grade (%) | | 0 | | | | 0 | | |
| Flared Approach: Exists?/Storage | | | No | | / | | / | |
| Lanes | | 0 | 1 | 0 | | | | |
| Configuration | | | LTR | | | | | |

Delay, Queue Length, and Level of Service

| Approach | EB | WB | Northbound | | | | Southbound | |
|------------------|----|------|------------|------|---|----|------------|----|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Config | | LT | | LTR | | | | |
| v (vph) | | 41 | | 188 | | | | |
| C(m) (vph) | | 1323 | | 361 | | | | |
| v/c | | 0.03 | | 0.52 | | | | |
| 95% queue length | | 0.10 | | 3.15 | | | | |
| Control Delay | | 7.8 | | 25.7 | | | | |
| LOS | | A | | D | | | | |
| Approach Delay | | | | 25.7 | | | | |
| Approach LOS | | | | D | | | | |

TWO-WAY STOP CONTROL SUMMARY

Analyst: RHC
 Agency/Co.: RCE
 Date Performed: 12/24/2004
 Analysis Time Period: AM Peak - existing + proj
 Intersection: Campo & Kenwood
 Jurisdiction: County of San Diego
 Units: U. S. Customary
 Analysis Year: 2004
 Project ID: Trinity Church
 East/West Street: Campo Road
 North/South Street: Kenwood Drive
 Intersection Orientation: EW

Study period (hrs): 1.00

Vehicle Volumes and Adjustments

| Major Street: | Approach Movement | Eastbound | | | | Westbound | | | |
|------------------------|-------------------|-----------|------|------|---|-----------|------|----|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | | |
| | | L | T | R | L | T | R | | |
| Volume | | | 167 | 93 | | 44 | 617 | | |
| Peak-Hour Factor, PHF | | | 1.00 | 1.00 | | 1.00 | 1.00 | | |
| Hourly Flow Rate, HFR | | | 167 | 93 | | 44 | 617 | | |
| Percent Heavy Vehicles | | | -- | -- | | 0 | -- | -- | |
| Median Type/Storage | | Undivided | | | | / | | | |
| RT Channelized? | | | | | | | | | |
| Lanes | | | 1 | 0 | | 0 | 1 | | |
| Configuration | | | | TR | | | LT | | |
| Upstream Signal? | | | No | | | | No | | |

| Minor Street: | Approach Movement | Northbound | | | | Southbound | | | |
|----------------------------------|-------------------|------------|------|------|----|------------|----|---|--|
| | | 7 | 8 | 9 | 10 | 11 | 12 | | |
| | | L | T | R | L | T | R | | |
| Volume | | 141 | 0 | 53 | | | | | |
| Peak Hour Factor, PHF | | 1.00 | 1.00 | 1.00 | | | | | |
| Hourly Flow Rate, HFR | | 141 | 0 | 53 | | | | | |
| Percent Heavy Vehicles | | 0 | 0 | 0 | | | | | |
| Percent Grade (%) | | | 0 | | | 0 | | | |
| Flared Approach: Exists?/Storage | | | | No | / | | | / | |
| Lanes | | 0 | 1 | 0 | | | | | |
| Configuration | | | LTR | | | | | | |

Delay, Queue Length, and Level of Service

| Approach | EB | WB | Northbound | | | | Southbound | | | |
|------------------|----|------|------------|------|---|----|------------|----|--|--|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| Lane Config | | LT | | LTR | | | | | | |
| v (vph) | | 44 | | 194 | | | | | | |
| C(m) (vph) | | 1316 | | 357 | | | | | | |
| v/c | | 0.03 | | 0.54 | | | | | | |
| 95% queue length | | 0.10 | | 3.43 | | | | | | |
| Control Delay | | 7.8 | | 26.9 | | | | | | |
| LOS | | A | | D | | | | | | |
| Approach Delay | | | | 26.9 | | | | | | |
| Approach LOS | | | | D | | | | | | |

TWO-WAY STOP CONTROL SUMMARY

Analyst: RHC
 Agency/Co.: RCE
 Date Performed: 12/24/2004
 Analysis Time Period: AM Peak - existing + cumul.
 Intersection: Campo & Kenwood
 Jurisdiction: County of San Diego
 Units: U. S. Customary
 Analysis Year: 2004
 Project ID: Trinity Church
 East/West Street: Campo Road
 North/South Street: Kenwood Drive
 Intersection Orientation: EW

Study period (hrs): 1.00

Vehicle Volumes and Adjustments

| Major Street: | Approach | Eastbound | | | | Westbound | | |
|------------------------|----------|-----------|------|------|------|-----------|----|--|
| | Movement | 1 | 2 | 3 | 4 | 5 | 6 | |
| | | L | T | R | L | T | R | |
| Volume | | | 168 | 93 | 44 | 619 | | |
| Peak-Hour Factor, PHF | | | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Hourly Flow Rate, HFR | | | 168 | 93 | 44 | 619 | | |
| Percent Heavy Vehicles | | | -- | -- | 0 | -- | -- | |
| Median Type/Storage | | Undivided | | | | / | | |
| RT Channelized? | | | | | | | | |
| Lanes | | | 1 | 0 | | 0 | 1 | |
| Configuration | | | TR | | | LT | | |
| Upstream Signal? | | | No | | | No | | |

| Minor Street: | Approach | Northbound | | | | Southbound | | |
|----------------------------------|----------|------------|------|------|----|------------|----|--|
| | Movement | 7 | 8 | 9 | 10 | 11 | 12 | |
| | | L | T | R | L | T | R | |
| Volume | | 141 | 0 | 53 | | | | |
| Peak Hour Factor, PHF | | 1.00 | 1.00 | 1.00 | | | | |
| Hourly Flow Rate, HFR | | 141 | 0 | 53 | | | | |
| Percent Heavy Vehicles | | 0 | 0 | 0 | | | | |
| Percent Grade (%) | | | 0 | | | 0 | | |
| Flared Approach: Exists?/Storage | | | | No | / | | / | |
| Lanes | | 0 | 1 | 0 | | | | |
| Configuration | | | LTR | | | | | |

Delay, Queue Length, and Level of Service

| Approach | EB | WB | Northbound | | | | Southbound | | |
|------------------|----|------|------------|------|---|----|------------|----|--|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 | |
| Lane Config | | LT | | LTR | | | | | |
| v (vph) | | 44 | | 194 | | | | | |
| C(m) (vph) | | 1315 | | 356 | | | | | |
| v/c | | 0.03 | | 0.54 | | | | | |
| 95% queue length | | 0.10 | | 3.45 | | | | | |
| Control Delay | | 7.8 | | 27.0 | | | | | |
| LOS | | A | | D | | | | | |
| Approach Delay | | | | 27.0 | | | | | |
| Approach LOS | | | | D | | | | | |

TWO-WAY STOP CONTROL SUMMARY

Analyst: RHC
 Agency/Co.: RCE
 Date Performed: 12/24/2004
 Analysis Time Period: PM Peak - existing
 Intersection: Campo & Kenwood
 Jurisdiction: County of San Diego
 Units: U. S. Customary
 Analysis Year: 2004
 Project ID: Trinity Church
 East/West Street: Campo Road
 North/South Street: Kenwood Drive
 Intersection Orientation: EW

Study period (hrs): 1.00

Vehicle Volumes and Adjustments

| Major Street: | Approach Movement | Eastbound | | | | Westbound | | |
|------------------------|-------------------|-----------|------|------|---|-----------|------|----|
| | | 1 | 2 | 3 | | 4 | 5 | 6 |
| | | L | T | R | | L | T | R |
| Volume | | | 374 | 94 | | 24 | 184 | |
| Peak-Hour Factor, PHF | | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Hourly Flow Rate, HFR | | | 374 | 94 | | 24 | 184 | |
| Percent Heavy Vehicles | | | -- | -- | | 0 | -- | -- |
| Median Type/Storage | | Undivided | | | / | | | |
| RT Channelized? | | | | | | | | |
| Lanes | | | 1 | 0 | | 0 | 1 | |
| Configuration | | | TR | | | LT | | |
| Upstream Signal? | | | No | | | No | | |

| Minor Street: | Approach Movement | Northbound | | | | Southbound | | |
|----------------------------------|-------------------|------------|------|------|---|------------|----|----|
| | | 7 | 8 | 9 | | 10 | 11 | 12 |
| | | L | T | R | | L | T | R |
| Volume | | 64 | 0 | 28 | | | | |
| Peak Hour Factor, PHF | | 1.00 | 1.00 | 1.00 | | | | |
| Hourly Flow Rate, HFR | | 64 | 0 | 28 | | | | |
| Percent Heavy Vehicles | | 0 | 0 | 0 | | | | |
| Percent Grade (%) | | | 0 | | | 0 | | |
| Flared Approach: Exists?/Storage | | No | | | / | | | |
| Lanes | | 0 | 1 | 0 | | | | |
| Configuration | | LTR | | | | | | |

Delay, Queue Length, and Level of Service

| Approach | EB | WB | Northbound | | | | Southbound | | | |
|------------------|----|------|------------|---|------|---|------------|----|----|----|
| Movement | 1 | 4 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Lane Config | | LT | | | LTR | | | | | |
| <hr/> | | | | | | | | | | |
| v (vph) | | 24 | | | 92 | | | | | |
| C(m) (vph) | | 1104 | | | 474 | | | | | |
| v/c | | 0.02 | | | 0.19 | | | | | |
| 95% queue length | | 0.07 | | | 0.72 | | | | | |
| Control Delay | | 8.3 | | | 14.4 | | | | | |
| LOS | | A | | | B | | | | | |
| Approach Delay | | | | | 14.4 | | | | | |
| Approach LOS | | | | | B | | | | | |

TWO-WAY STOP CONTROL SUMMARY

Analyst: RHC
 Agency/Co.: RCE
 Date Performed: 12/24/2004
 Analysis Time Period: PM Peak - existing + project
 Intersection: Campo & Kenwood
 Jurisdiction: County of San Diego
 Units: U. S. Customary
 Analysis Year: 2004
 Project ID: Trinity Church
 East/West Street: Campo Road
 North/South Street: Kenwood Drive
 Intersection Orientation: EW

Study period (hrs): 1.00

Vehicle Volumes and Adjustments

| Major Street: | Approach Movement | Eastbound | | | | Westbound | | |
|---------------|-------------------|-----------|---|---|---|-----------|---|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | |
| | | L | T | R | L | T | R | |

| | | | | | | | |
|------------------------|-----------|------|------|--|------|------|----|
| Volume | | 374 | 95 | | 25 | 184 | |
| Peak-Hour Factor, PHF | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Hourly Flow Rate, HFR | | 374 | 95 | | 25 | 184 | |
| Percent Heavy Vehicles | | -- | -- | | 0 | -- | -- |
| Median Type/Storage | Undivided | | | | / | | |
| RT Channelized? | | | | | | | |
| Lanes | | 1 | 0 | | 0 | 1 | |
| Configuration | | TR | | | LT | | |
| Upstream Signal? | | No | | | No | | |

| Minor Street: | Approach Movement | Northbound | | | | Southbound | | |
|---------------|-------------------|------------|---|---|----|------------|----|--|
| | | 7 | 8 | 9 | 10 | 11 | 12 | |
| | | L | T | R | L | T | R | |

| | | | | | | | |
|----------------------------------|--|------|------|------|---|---|---|
| Volume | | 66 | 0 | 29 | | | |
| Peak Hour Factor, PHF | | 1.00 | 1.00 | 1.00 | | | |
| Hourly Flow Rate, HFR | | 66 | 0 | 29 | | | |
| Percent Heavy Vehicles | | 0 | 0 | 0 | | | |
| Percent Grade (%) | | 0 | | | | 0 | |
| Flared Approach: Exists?/Storage | | No | | | / | | / |
| Lanes | | 0 | 1 | 0 | | | |
| Configuration | | LTR | | | | | |

Delay, Queue Length, and Level of Service

| Approach | EB | WB | Northbound | | | Southbound | | |
|-------------|----|----|------------|-----|---|------------|----|----|
| Movement | 1 | 4 | 7 | 8 | 9 | 10 | 11 | 12 |
| Lane Config | | LT | | LTR | | | | |

| | | |
|------------------|------|------|
| v (vph) | 25 | 95 |
| C(m) (vph) | 1103 | 471 |
| v/c | 0.02 | 0.20 |
| 95% queue length | 0.07 | 0.75 |
| Control Delay | 8.3 | 14.6 |
| LOS | A | B |
| Approach Delay | | 14.6 |
| Approach LOS | | B |

TWO-WAY STOP CONTROL SUMMARY

Analyst: RHC
 Agency/Co.: RCE
 Date Performed: 12/24/2004
 Analysis Time Period: PM Peak - existing + cuml.
 Intersection: Campo & Kenwood
 Jurisdiction: County of San Diego
 Units: U. S. Customary
 Analysis Year: 2004
 Project ID: Trinity Church
 East/West Street: Campo Road
 North/South Street: Kenwood Drive
 Intersection Orientation: EW

Study period (hrs): 1.00

Vehicle Volumes and Adjustments

| Major Street: | Approach Movement | Eastbound | | | | Westbound | | |
|------------------------|-------------------|-----------|------|------|---|-----------|------|----|
| | | 1 | 2 | 3 | | 4 | 5 | 6 |
| | | L | T | R | | L | T | R |
| Volume | | | 376 | 95 | | 25 | 186 | |
| Peak-Hour Factor, PHF | | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Hourly Flow Rate, HFR | | | 376 | 95 | | 25 | 186 | |
| Percent Heavy Vehicles | | | -- | -- | | 0 | -- | -- |
| Median Type/Storage | | Undivided | | | / | | | |
| RT Channelized? | | | | | | | | |
| Lanes | | | 1 | 0 | | 0 | 1 | |
| Configuration | | | | TR | | | LT | |
| Upstream Signal? | | | No | | | | No | |

| Minor Street: | Approach Movement | Northbound | | | | Southbound | | |
|----------------------------------|-------------------|------------|------|------|---|------------|----|----|
| | | 7 | 8 | 9 | | 10 | 11 | 12 |
| | | L | T | R | | L | T | R |
| Volume | | 66 | 0 | 29 | | | | |
| Peak Hour Factor, PHF | | 1.00 | 1.00 | 1.00 | | | | |
| Hourly Flow Rate, HFR | | 66 | 0 | 29 | | | | |
| Percent Heavy Vehicles | | 0 | 0 | 0 | | | | |
| Percent Grade (%) | | | 0 | | | 0 | | |
| Flared Approach: Exists?/Storage | | | | No | / | | | / |
| Lanes | | 0 | 1 | 0 | | | | |
| Configuration | | | LTR | | | | | |

Delay, Queue Length, and Level of Service

| Approach | EB | WB | Northbound | | | Southbound | | | | |
|------------------|----|------|------------|---|------|------------|--|----|----|----|
| Movement | 1 | 4 | | 7 | 8 | 9 | | 10 | 11 | 12 |
| Lane Config | | LT | | | LTR | | | | | |
| <hr/> | | | | | | | | | | |
| v (vph) | | 25 | | | 95 | | | | | |
| C(m) (vph) | | 1101 | | | 469 | | | | | |
| v/c | | 0.02 | | | 0.20 | | | | | |
| 95% queue length | | 0.07 | | | 0.76 | | | | | |
| Control Delay | | 8.3 | | | 14.6 | | | | | |
| LOS | | A | | | B | | | | | |
| Approach Delay | | | | | 14.6 | | | | | |
| Approach LOS | | | | | B | | | | | |